

AMENDMENT UNDER 37 C.F.R §1.111

U.S. Serial No.: 09/585,475

obtaining a test biological sample containing protein from said tissue of interest,

measuring levels of at least one protein marker selected from the group consisting of Actin gamma, Adenosine kinase (EC 2.7.1.20), Adensylhomocysteinase, Alanine aminotransferase, Alpha 2 μ -globulin, Annexin IV, Annexin VI, Antiquitin, Apolipoprotein A-I, Apolipoprotein E precursor, Catechol O-methyl transferase, Calreticulin, Catalase, Cytokeratin ends A, N-G, N-G-dimethylarginine dimethylaminohydrolase, D-dopachrome tautomerase, Epoxide hydrolase, soluble, ER60 protease; 58kD microsomal protein, Fatty acid binding protein, liver, Fructose-1,6-bisphosphatase (EC 3.1.3.11) (MSN 79), Fructose-1,6-bisphosphatase (EC 3.1.3.11) (MSN 182), Fructose-1,6-bisphosphatase (EC 3.1.3.11) (MSN 577), Fumarylacetoacetate hydrolase, 75kD glucose related protein, Glucose-6-phosphate 1-dehydrogenase (EC 1.1.1.49), Glutathione synthetase, 90kD heat shock protein, Heme oxygenase-1, Heterogeneous nuclear ribonucleoprotein K, HMG-CoA synthase, mitochondrial frag. (EC 4.1.3.5), HumorF06, N-hydroxyarylamine sulfotransferase (EC 2.8.2.-), 3-Hydroxyanthranilate 3,4-dioxygenase (EC 1.13.11.6), 4-Hydroxyphenylpyruvate dioxygenase, Induced in androgen-indep. prostate cells by eff. of apopt., Isopentenyl-diphosphate delta-isomerase (EC 5.3.3.2), Isovaleryl-CoA dehydrogenase, Keratin type II cytoskeletal 8 (MSN 97), Keratin type I cytoskeletal 18, Keratin type II cytoskeletal 8 (MSN 41), Ketohexokinase (EC 2.7.1.3), Lamin b, Major vault protein, Methionine adensyltransferase, 3-Mercaptopyruvate sulfotransferase (EC 2.8.1.2), 23kD Morphine-binding protein, Nucleolar phosphoprotein B23 (MSN 574), Nucleolar phosphoprotein B23 (MSN 671), 2-oxoisovalerate dehydrogenase alpha subunit, mitochondria, Peroxisomal enoyl hydratase-like protein, Phenylalanine hydroxylase (EC 1.14.16.1), Protein kinase C inhibitor, Pyruvate kinase, isoenzymes (MSN 282), pyruvate kinase L, Ras-GTPase-activating protein SH3-domain binding protein, Senescence marker protein-30 (MSN 55), Senescence marker protein-30 (MSN 103), Serine

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protease inhibitor 2, Tropomysin, MSN 42, MSN 59, MSN 66, MSN 69, MSN 73, MSN 76, MSN 83, MSN 117, MSN 122, MSN 127, MSN 128, MSN 139, MSN 143, MSN 148, MSN 154, MSN 155, MSN 197, MSN 203, MSN 218, MSN 229, MSN 232, MSN 237, MSN 238, MSN 261, MSN 267, MSN 268, MSN 275, MSN 279, MSN 286, MSN 270, MSN 289, MSN 292, MSN 297, MSN 310, MSN 311, MSN 318, MSN 322, MSN 339, MSN 350, MSN 358, MSN 362, MSN 365, MSN 371, MSN 372, MSN 379, MSN 384, MSN 395, MSN 399, MSN 416, MSN 420, MSN 423, MSN 427, MSN 434, MSN 435, MSN 438, MSN 461, MSN 469, MSN 479, MSN 492, MSN 497, MSN 502, MSN 506, MSN 510, MSN 522, MSN 546, MSN 556, MSN 557, MSN 565, MSN 569, MSN 571, MSN 578, MSN 602, MSN 605, MSN 613, MSN 618, MSN 625, MSN 637, MSN 644, MSN 646, MSN 653, MSN 665, MSN 666, MSN 669, MSN 681, MSN 689, MSN 718, MSN 719, MSN 721, MSN 777, MSN 779, MSN 787, MSN 802, MSN 806, MSN 810, MSN 839, MSN 876, MSN 879, MSN 887, MSN 888, MSN 900, MSN 905, MSN 966, MSN 984, MSN 1065, MSN 1081, MSN 1053, MSN 1172, MSN 1195, MSN 1215, and MSN 1255,

and

comparing the levels of said markers to the levels of the same markers in a control sample or other sample exposed to a known toxic or a known effective agent to determine whether the tissue of interest in a subject is experiencing toxicity or an effective response or the degree of such responses.

86. (Amended) The method of claim 85 wherein said protein marker is selected from the group consisting of MSN 34, MSN 42, MSN 59, ~~MSN 66~~, MSN 69, MSN 73, MSN 76, MSN 83, MSN 117, MSN 122, MSN 127, MSN 128, MSN 139, MSN 143, MSN 148, MSN 154, MSN 155, MSN 197, MSN 203, MSN 218, MSN 229, MSN 232, MSN 237, MSN 238, MSN 261, MSN 267, MSN 268, MSN 275, MSN 279, MSN 286, MSN 270, MSN 289, MSN 292, MSN 297, MSN 310, MSN 311, MSN 318, MSN 322, MSN 339, MSN 350,

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MSN 358, MSN 362, MSN 365, MSN 371, MSN 372, MSN 379, MSN 384, MSN 395, MSN 399, MSN 416, MSN 420, MSN 423, MSN 427, MSN 434, MSN 435, MSN 438, MSN 461, MSN 469, MSN 479, MSN 492, MSN 497, MSN 502, MSN 506, MSN 510, MSN 522, MSN 546, MSN 556, MSN 557, MSN 565, MSN 569, MSN 571, MSN 578, MSN 602, MSN 605, MSN 613, MSN 618, MSN 625, MSN 637, MSN 644, MSN 646, MSN 653, MSN 665, MSN 666, MSN 669, MSN 681, MSN 689, MSN 718, MSN 719, MSN 721, MSN 777, MSN 779, MSN 787, MSN 802, MSN 806, MSN 810, MSN 839, MSN 876, MSN 879, MSN 887, MSN 888, MSN 900, MSN 905, MSN 966, MSN 984, MSN 1065, MSN 1081, MSN 1053, MSN 1172, MSN 1195, MSN 1215, and MSN 1255.

89. (Amended) The method of claim 87 wherein the levels of protein markers in the test biological sample are compared to the levels of the same protein markers in biological samples exposed to a known effective agent or a known toxic agent.
91. (Amended) The method of claim 90 wherein the pharmaceutical is an antilipemic agent.
93. (Amended) The method of claim 85 wherein the agent is a pharmaceutical suspected of having the same mechanism of action as said known effective agent and is given in a pharmaceutically appropriate amount.
94. (Amended) The method of claim 93 wherein the pharmaceutical is an antilipemic agent.